

What is claimed is:

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A1
1 1. A system for wirelessly collecting vehicle data and for using collected vehicle data to
2 determine vehicle service recommendations or vehicle replacement part
3 recommendations, said system comprising:

4
5 an in-vehicle device interconnected with a vehicle; and

6
7 a communication interface device for data communicating wirelessly with said in-
8 vehicle device, said communication interface device having a data communication
9 connection with a data processing resource, said communication interface device
10 is an internet appliance;

11
12 wherein said in-vehicle device by way of said communication interface device data
13 communicates with said data processing resource.

14
1 2. The system in accordance with claim 1, wherein said data processing resource is a
2 global network data processing resource.

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1 3. The system in accordance with claim 1, wherein said in-vehicle device further
2 comprises:

3
4 a vehicle monitor and metering interface for measuring and monitoring said
5 vehicle telemetry data.

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1 4. The system in accordance with claim 3, wherein said vehicle monitor and metering
2 interface further comprises at least one of the following:

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4 an accelerometer for measuring or monitoring said vehicle acceleration changes;

5 a tachometer for measuring or monitoring said vehicle velocity; or

6 an odometer for measuring or monitoring said vehicle travel distance.

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1 5. The system in accordance with claim 1, wherein said in-vehicle device further
2 comprises:

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4 a vehicle radio interface for interconnecting said in-vehicle device to said vehicle
5 radio.

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1 6. The system in accordance with claim 5, wherein said vehicle radio by way of said
2 vehicle radio interface data communicates with global network based data processing
3 resources.

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1 7. The system in accordance with claim 5, wherein said vehicle radio by way of said
2 vehicle radio interface receives data communication from a satellite.

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2 8. The system in accordance with claim 1, wherein said in-vehicle device further
3 comprises:

4
5 an alarm system interface for monitoring said vehicle security status.

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1 9. The system in accordance with claim 1, wherein said in-vehicle device further
2 comprises:

3
4 a personal data assistant interface for data communicating between said in-vehicle
5 device and a personal data assistant device.

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1 10. The system in accordance with claim 9, wherein said personal data assistant interface
2 supports at least one of the following protocols and or standards: WIRELESS
3 APPLICATION PROTOCOL, BLUE TOOTH, WCDMA, GSM, CDMA, CDPD,
4 TDMA, 2G type compliant, 3G type compliant, spread spectrum, a single frequency
5 transceiver, a dual frequency transceiver, INTEL PRO/WIRELESS 5000 LAN, IEEE
6 802.11, IEEE 802.11A, or IEEE 802.11B.

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1 11. The system in accordance with claim 1, wherein said in-vehicle device further
2 comprises:

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4 a user interface including a display, and a microphone for enabling a user to issue
5 voice commands to said in-vehicle device.

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1 12. The system in accordance with claim 11, wherein said in-vehicle device is located
2 external to said vehicle passenger compartment area and said user interface is electrically
3 tethered to said in-vehicle device, such that said user can interact with said user interface
4 from within said vehicle passenger compartment area.

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1 13. The system in accordance with claim 1, wherein said in-vehicle device further
2 comprises:

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4 a global positioning receiver interface for determining the geographic location of
5 said in-vehicle device.

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1 14. The system in accordance with claim 1, wherein said in-vehicle device is retrofitted
2 into said vehicle.

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15. The system in accordance with claim 1, wherein said in-vehicle device further comprises a wireless transceiver.

16. The system in accordance with claim 15 wherein, said wireless transceiver is at least one of the following: a wireless modem, a wireless phone, a cellular phone, a CDPD device, a CDMA device, a WCDMA device, a GSM device, a TDMA device, 2G type compliant device, a 3G type compliant device, INTEL PRO/WIRELESS 5000 LAN adapter device, IEEE 802.11 device, IEEE 802.11A device, IEEE 802.11B device, a spread spectrum transceiver, a single frequency transceiver, a dual frequency transceiver, a programmable storage device, a personal data assistant, a pager, pocket PC.

17. The system in accordance with claim 16 wherein, said programmable storage device is at least one of the following: pocket PC, personal data assistant, a wireless phone, a pager, an RFID device, smart card, magnetic card, a key fob, a key chain, or a vehicle key.

18. The system in accordance with claim 1, wherein wireless data communication between said in-vehicle device and said communication interface device utilizes at least one of the following communication protocols and or standards: WIRELESS APPLICATION PROTOCOL, BLUE TOOTH, WCDMA, GSM, TDMA, CDMA, CDPD, 2G type compliant, 3G type compliant, a single frequency transceiver, a dual frequency transceiver, INTEL PRO/WIRELESS 5000 LAN, IEEE 802.11, IEEE 802.11A, or IEEE 802.11B.

19. A system for wirelessly collecting vehicle data and for using collected vehicle data to determine vehicle service recommendations and or vehicle replacement part recommendations, said system comprising:

an in-vehicle device interconnected with a vehicle; and

6
7 a communication interface device for data communicating wirelessly with said in-
8 vehicle device, said communication interface device having a data communication
9 connection with a data processing resource;

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11 said in-vehicle device further comprises at least one of the following:

12
13 a vehicle monitor and metering interface for measuring and monitoring
14 said vehicle telemetry data;

15
16 a vehicle radio interface for interconnecting said in-vehicle device to said
17 vehicle radio;

18
19 an alarm system interface for monitoring said vehicle security status;

20
21 a personal data assistant interface for data communicating between said in-
22 vehicle device and a personal data assistant device;

23
24 a user interface including a display, and a microphone for enabling a user
25 to issue voice commands to said in-vehicle device; or

26
27 a global positioning receiver interface for determining the geographic
28 location of said in-vehicle device;

29
30 wherein said in-vehicle device by way of said communication interface device data
31 communicates with said data processing resource.
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2 20. A method of vehicle servicing by utilizing wirelessly communicated vehicle data to
3 determine vehicle service recommendations, or vehicle part recommendations, said
4 method of vehicle servicing comprising the steps of:

5
6 a) receiving a plurality of data from an in-vehicle device, wherein said in-vehicle
7 device is interconnected with a vehicle;

8
9 b) accessing a plurality of data to obtain information related to said vehicle;

10
11 c) determining a plurality of vehicle service recommendations, or a plurality of
12 vehicle replacement part recommendations; and

13
14 d) allowing a user, from said vehicle, to review and select at least one of said
15 plurality of vehicle service recommendations, or at least one of said plurality of
16 vehicle replacement part recommendations;

17
1 21. The method of vehicle servicing in accordance with claim 20 further comprising the
2 steps of:

3
4 a) effectuating an e-commerce or an e-business transaction to place an order for
5 said user selected said plurality of vehicle service recommendations, or to place
6 an order for said user selected said plurality of vehicle replacement part
7 recommendations; and

8
9 b) confirming said e-commerce, or said e-business order placement.

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1 22. The method of vehicle servicing in accordance with claim 21, wherein the step of
2 confirming said e-commerce, or said e-business order further comprises the step of:
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4 a) charging a plurality of fees for transacting said e-commerce, or said e-
5 business transaction.

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1 23. A method of vehicle servicing including determining vehicle service
2 recommendations, or determining vehicle replacement part recommendations, said
3 method of vehicle servicing comprising the steps of:

4
5 a) monitoring a plurality of vehicle data associated with a vehicle, said plurality of
6 vehicle data being data communicated wirelessly between an in-vehicle device
7 located in said vehicle and a communication interface device;

8
9 b) analyzing said plurality of vehicle data;

10
11 c) accessing a plurality of data to obtain information related to determining a
12 plurality of vehicle service recommendations, or a plurality of vehicle
13 replacement part recommendations;

14
15 d) determining said plurality of vehicle service recommendations, or said plurality
16 of vehicle replacement part recommendations;

17
18 e) presenting analysis to at least one of the following: a mechanic, a customer, a
19 user, a manufacture, a service center, an auto part merchant, an appropriate
20 plurality of agents, or an appropriate plurality of agencies; and

21
22 f) allowing said user, from said vehicle, to review and select at least one of said
23 plurality of vehicle service recommendations, or select at least one of said
24 plurality of vehicle replacement part recommendations.
25

26 24. The method of vehicle servicing in accordance with claim 23 further comprising the
27 steps of:

28
29 a) effectuating an e-commerce or an e-business transaction to place an order for
30 said user selected said plurality of vehicle service recommendations, or place an
31 order for said user selected said plurality of vehicle replacement part
32 recommendations; and

33
34 b) confirming said e-commerce, or said e-business order placement.
35

1 25. The method of vehicle servicing in accordance with claim 24, wherein the step of
2 confirming said e-commerce, or said e-business order placement further comprises the
3 step of:

4
5 a) charging a plurality of fees for transacting said e-commerce, or said e-business
6 transaction.
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1 26. A method of performing remote vehicle diagnostics comprising the steps of:

2
3 a) receiving at a communication interface device a plurality of data, said plurality
4 of data being data communicated by an in-vehicle device located in a vehicle, or
5 data communicated by a programmable storage device carried by a user;

6
7 b) communicating said plurality of data from said communication interface device
8 to a remote location by way of a global network;

9
10 c) analyzing said plurality of data at said remote location;
11

12 d) accessing a plurality of data processing resources to obtain information related
13 to determining a plurality of vehicle service recommendations, and or determining
14 a plurality of vehicle replacement part recommendations;

15
16 e) determining said plurality of vehicle service recommendations, and or said
17 plurality of vehicle replacement part recommendations; and

18
19 f) allowing said user, from said vehicle, to review and or select at least one of said
20 plurality of vehicle service recommendations, and or to review and or select at
21 least one of said plurality of vehicle replacement part recommendations.

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23 27. The method of performing remote vehicle diagnostics in accordance with claim 26
24 further comprising the steps of:

25
26 a) effectuating an e-commerce or an e-business transaction by placing an order for
27 said user selected said plurality of vehicle service recommendations, or by placing
28 an order for said user selected said plurality of vehicle replacement part
29 recommendations; and

30
31 b) confirming said e-commerce, or said e-business order placement.

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1 28. The method of performing remote vehicle diagnostics in accordance with claim 27,
2 wherein the step of confirming said e-commerce or said e-business order further
3 comprises the step of:

4
5 charging a plurality of fees for transacting said e-commerce, and or said e-
6 business transaction.

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29. The method of performing remote vehicle diagnostics in accordance with claim 26 wherein, said programmable storage device is at least one of the following: pocket PC, personal data assistant, a wireless phone, a pager, an RFID device, smart card, magnetic card, a key fob, a key chain, or vehicle key.

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0.11	0.27	0.37	0.47	0.57	0.67	0.77	0.87	0.97	1.07	1.17	1.27	1.37	1.47	1.57	1.67	1.77	1.87	1.97	2.07	2.17	2.27	2.37	2.47	2.57	2.67	2.77	2.87	2.97	3.07	3.17	3.27	3.37	3.47	3.57	3.67	3.77	3.87	3.97	4.07	4.17	4.27	4.37	4.47	4.57	4.67	4.77	4.87	4.97	5.07	5.17	5.27	5.37	5.47	5.57	5.67	5.77	5.87	5.97	6.07	6.17	6.27	6.37	6.47	6.57	6.67	6.77	6.87	6.97	7.07	7.17	7.27	7.37	7.47	7.57	7.67	7.77	7.87	7.97	8.07	8.17	8.27	8.37	8.47	8.57	8.67	8.77	8.87	8.97	9.07	9.17	9.27	9.37	9.47	9.57	9.67	9.77	9.87	9.97	10.07	10.17	10.27	10.37	10.47	10.57	10.67	10.77	10.87	10.97	11.07	11.17	11.27	11.37	11.47	11.57	11.67	11.77	11.87	11.97	12.07	12.17	12.27	12.37	12.47	12.57	12.67	12.77	12.87	12.97	13.07	13.17	13.27	13.37	13.47	13.57	13.67	13.77	13.87	13.97	14.07	14.17	14.27	14.37	14.47	14.57	14.67	14.77	14.87	14.97	15.07	15.17	15.27	15.37	15.47	15.57	15.67	15.77	15.87	15.97	16.07	16.17	16.27	16.37	16.47	16.57	16.67	16.77	16.87	16.97	17.07	17.17	17.27	17.37	17.47	17.57	17.67	17.77	17.87	17.97	18.07	18.17	18.27	18.37	18.47	18.57	18.67	18.77	18.87	18.97	19.07	19.17	19.27	19.37	19.47	19.57	19.67	19.77	19.87	19.97	20.07	20.17	20.27	20.37	20.47	20.57	20.67	20.77	20.87	20.97	21.07	21.17	21.27	21.37	21.47	21.57	21.67	21.77	21.87	21.97	22.07	22.17	22.27	22.37	22.47	22.57	22.67	22.77	22.87	22.97	23.07	23.17	23.27	23.37	23.47	23.57	23.67	23.77	23.87	23.97	24.07	24.17	24.27	24.37	24.47	24.57	24.67	24.77	24.87	24.97	25.07	25.17	25.27	25.37	25.47	25.57	25.67	25.77	25.87	25.97	26.07	26.17	26.27	26.37	26.47	26.57	26.67	26.77	26.87	26.97	27.07	27.17	27.27	27.37	27.47	27.57	27.67	27.77	27.87	27.97	28.07	28.17	28.27	28.37	28.47	28.57	28.67	28.77	28.87	28.97	29.07	29.17	29.27	29.37	29.47	29.57	29.67	29.77	29.87	29.97	30.07	30.17	30.27	30.37	30.47	30.57	30.67	30.77	30.87	30.97	31.07	31.17	31.27	31.37	31.47	31.57	31.67	31.77	31.87	31.97	32.07	32.17	32.27	32.37	32.47	32.57	32.67	32.77	32.87	32.97	33.07	33.17	33.27	33.37	33.47	33.57	33.67	33.77	33.87	33.97	34.07	34.17	34.27	34.37	34.47	34.57	34.67	34.77	34.87	34.97	35.07	35.17	35.27	35.37	35.47	35.57	35.67	35.77	35.87	35.97	36.07	36.17	36.27	36.37	36.47	36.57	36.67	36.77	36.87	36.97	37.07	37.17	37.27	37.37	37.47	37.57	37.67	37.77	37.87	37.97	38.07	38.1
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